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## TP6.5 Signature Phono Preamp



The **TP-6.5 Signature Phono Stage** is designed to complement and match the TL-6.5 and TL7.5 Linestage Preamplifiers in sonic performance, user interface and cosmetics. Our goal is to challenge the current state of the art and develop a standalone MC step up to complement the top VTL linestage preamplifiers, the TL7.5 Series III and TL-6.5 II, and provide a reference phono step up.

The TP-6.5 appeals to VTL's core users who have been waiting patiently for a matching phono stage for their VTL linestages. The phono stage employs hybrid JFET/tube circuitry for quiet operation, multiple low-noise cascaded regulators and shielded power supplies for dynamics, accurate 4-corner passive RIAA equalization and 68dB of gain from the balanced outputs, all in a single chassis unit. All of the required user settings are offered, both via front panel and remote control.

The new design yields a wide and deep soundstage, realistic image proportions, and startling dynamic range and speed, with massive headroom capability and low noise. With the final voicing complete there is even more refinement and nuance, with a delicacy that is especially noticeable in the way the sustain and decay of instruments are captured, and yet at the same time it retains the classic VTL characteristic of solid, controlled bass.

The TP6.5 also offers a high quality transformer Moving Coil step up option, both to offer a low-noise MC step up, and a second MC stage. This second MC input replaces the original MM input that is normally standard in the TP6.5 Phono Stage, and uses the existing MM input to provide access to the transformer MC step up.

The addition of the step up transformer allows both for appropriate loading for very low-output cartridges, and the flexibility of handling different cartridges with different step up methods, as in some cases certain cartridges can sound substantially better with transformers than they do with active gain stages. The transformer also allows the cartridge to be loaded via the transformer, instead of via the loading resistor, retaining as much of the signal available from these cartridges as possible.

Switching between the inputs is done only after the signal has been amplified, avoiding signal losses inherent in switching the fragile MC signal straight from the cartridge.

This option offers the maximum MC cartridge handling flexibility, and also accommodates multiple arm/cartridge setups with multiple MC cartridges, as both inputs can be connected simultaneously.



## TP-6.5 Signature Phono Stage

### Functionality features:

- Full front panel functionality:
  - Input select
  - MC Gain adjust: 5 steps of 6dB: 44dB, 50dB, 56dB, 62dB, 68dB
  - MC Step Up Option Gain: 65 dB balanced output, 59 dB single-ended output
  - Load setting: MC: 100, 250, 470, 1K, 2.5K, 4.7K, 47K and User Defined, and MM – 10k, 22k, 47k and User Defined.
  - Load setting for MC Step Up: 47, 100, 470, 1.0K Ohms
  - Mono switch
  - Phase flip, absolute, and channel to channel
  - RIAA select, for Enhanced RIAA and Rumble cut
  - Mute
- Remote controllable Power, Input select, Mute, Phase reverse, Rumble cut, Mono, Gain, Cartridge Load

### Circuit Features:

- 2 single ended inputs, with discrete load settings for each input
- Single-ended and Balanced outputs, with 68dB total gain balanced
- Active Hybrid low noise J-FET driving high current 12AU7 mc gain stage for highest resolution of small signal levels
- All high fidelity tubes: 12AU7, 12AX7, 12AT7, all operating in linear range
- Accurate 4-corner passive RIAA filter, with split pole for greater accuracy
- Zero loop feedback
- Gain trims for accurate channel to channel balance
- Signature and Reference-level coupling capacitors
- Shock mounted gain stages for resistance to vibration interference
- Extensive RF filtering on AC path
- Switchable RF filtering on both inputs.
- Low radiation UI core power transformers, with dual mono supplies, and separate logic supply
- Dual mono multiple cascaded precision-regulated and shielded power supplies for low noise, with film bypass for high frequency performance

- High quality transformer MC step up option for low noise and excellent match to low-output MC cartridges
- Quiet sleep mode on processor when not in use
- Quiet 7-segment LED display on the front panel (for gain and load display)

### Physical features:

- Rigid braced steel and aluminum chassis for EMI, RF, and hum shielding with minimal interference from vibration
- All noisy components steel shielded for low RF and hum radiation.
- Additional steel shielding on amplifier section for lowest noise
- Matching cosmetics to the TL6.5 and TL-7.5 Linestage Preamplifiers

## TP-6.5 Specifications

Vacuum Tube Complement	2 x 12AU7 MC; 2 x 12AX7, 2 x 12AT7 MM; 2 x 12AT7
Inputs	2 pairs single-ended/RCA
Outputs	1 pair balanced out XLR out 1 pair single-ended RCA out
Remote Control Functions	Power MC/MM Source Select Gain up/down Mute Rumble Load Mono Phase
Maximum Gain	MC: 62dB single ended, 68dB balanced MM: 35 dB single ended, 40 dB balanced
Output Impedance	150 Ohms
Input Impedance (Cartridge Load)	Selectable MC: 100, 250, 470, 1K, 2.5K, 4.7K, 47K Ohms, User Defined Selectable MM: 10K, 22K, 47K, User Defined
Frequency response + 0 - 1 dB	1 Hz - 100KHz
Maximum Output Voltage < 1% THD	10 <u>VRMS@1KHz</u> (10K ohm load)
Channel Separation	> 70 dB @ 1KHz (>65 dB @ 20kHz)
Power Consumption	80 Watts
Dimensions	17.5 x 17.5 x 4.75 inch (44.45 x 44.45 x 12.06 cm)
Weight	50 lbs (22.72 Kg) Fully packed in one box